

REMARKS

Applicants acknowledge the Examiner's detailed analysis and comments on the pending claims and the cited prior art in the Office Action. Reconsideration and allowance of the application are respectfully requested.

The originally filed Claims 1-11 have not been amended and remain pending. New dependent claims, 12-20, have been added based on the original disclose. No new matter is added. Claims 1-20 are now pending.

Claims 1-11 stand rejected under 35 USC 102(b) as allegedly being anticipated by Kulakowski. This contention, however, is respectfully traversed because Claims 1-11 are distinctly different and thus are patentable.

Claim 1 recites a system that includes a cartridge which encloses a disk storing data, a carrier structured to enclose the cartridge and have a carrier door to permit access to the cartridge, a locking element to lock the cartridge within the carrier, a disk drive to receive the carrier and the cartridge held inside the carrier, a detection unit to detect receipt of the carrier and a transfer unit in the disk drive to transfer the cartridge from the carrier to the disk drive.

Kulakowski discloses a data storage subsystem 10 in Col. 4, line 57 -Col. 5, line 7:

Subsystem 10 includes cabinets 12-14 which house both media containing cartridges, control circuits, media devices (recorders and players) and the like as will become apparent. Cabinets 15A and 15B house only cartridges, all as later described. These cartridge only cabinets include any one of several mechanical construction so long as like-sized or modularly-sized bins are usable therein. The term modularly-sized bins indicates that all bins are an integral multiple of a minimum bin size. Media cartridges are transferred between a large plurality of cartridge storage receptacles 16 by a transport

system 17 and a selected one of the media devices (also termed drives, recorders, players and the like) 20, 21 and 21A. A plurality of devices 20 (FIG. 7) read and record optical media contained in a "small" optical disk containing cartridge 22 (FIG. 16) which contain a 90 mm optical disk.

According to Kulakowski, the device 20 is a disk drive.

The Office Action apparently mistakenly treats the device 20 in Kulakowski as the carrier recited in Claim 1. Applicants respectfully suggest that the device 20 described in Kulakowski should correspond to the disk drive recited in Claim 1, the cartridge 22 described in Kulakowski should correspond to the cartridge recited in Claim 1, and the subsystem 10 described in Kulakowski should correspond to the system in the preamble of Claim 1. In Kulakowski, all media cartridges are stored in removable storage bins 26 and 27. As seen in FIG. 33, half-sized bin 26 and full-size bin 27 respectively store small and large cartridges. Two bins 26 are insertable into one of the receptacles 16 while one bin 27 is insertable into a receptacle. Each of the receptacles receive either type of bin. See, Col. 5, lines 34-44.

Applicants respectfully submit that nothing in Kulakowski discloses or suggests the carrier recited in Claim 1.

The carrier recited in Claim 1 includes an electronic element to have updatable information about contents of data in the disk enclosed in said cartridge, a display operable to display said updatable information, and a user control to control which portion of said information is displayed. The Office Action cites the barcode label FIG. 13 in Kulakowski to show the electronic element. This barcode label in Kulakowski is for each of the bins 26 and 27. In addition, the Office Action contends that the barcode label in FIGS. 13 and 16 in Kulakowski teaches the "electronic element to have updatable information about contents of data in the disk enclosed in said

cartridge" in Claim 1. Applicants respectfully disagree. A barcode label as shown in FIG. 13 in Kulakowski is a printed pattern and thus is not an electronic element per se and does not contain any electronic component. Furthermore, once the barcode label as shown in FIG. 13 in Kulakowski is printed or generated, the barcode label and the information represented by the barcode label cannot be modified. Therefore, the information represented by the barcode label is not "updatable information" in the context of Claim 1. For these reasons, Claim 1 is distinctly different from Kulakowski.

The Office Action also contend that the display 50 in Kulakowski teaches the recited display for the carrier in Claim 1. This contention completely lacks support in Kulakowski and is inconsistent with Kulakowski. Kulakowski discloses that one or more operator panels 50 are provided on the cabinets housing the devices 20-21A. Panel 50 for cabinet 14 is not shown in FIGS. 2 and 3. Such panels are for manual control of the devices and maintenance of the subsystem. Device controllers for the devices 20-21A may be packaged as a part of the devices or may be circuit cards mounted in the respective cabinets in areas 51. Therefore, Kulakowski does not disclose anything related to the carrier as recited in Claim 1.

Clearly, the carrier recited in Claim 1 is missing in Kulakowski.

For at least the above reasons, Claim 1 is patentable.

Claim 2 is also patentable because Kulakowski does not disclose, at least, a cartridge as recited in Claim 2 that includes an electronic element having updatable information indicative of contents of data in said recording medium enclosed in said cartridge. In this regard, Kulakowski describes the following in Col. 6, line 61 to Col. 7, line 13:

Cartridges 22, 23 and 24 also may have externally readable bar code labels. It is preferred that the

internal and external bar code labels be identical, not limitation thereto intended. Cartridge 23 shown in FIGS. 14A and 14B holds an external bar code label on outwardly facing surface 49. Cartridge 24 (FIGS. 15A and 15B) is modified to accommodate both internal and external bar code labels. Orientation of cartridge 24 as stored in bins 26, 27 is rotated ninety degrees. The cartridge slots in the bins 104B (FIG. 33) are used rather than slots (not shown) having the same height at slots 104A and the width of slots 104B are used. Outwardly-opening gripper-slots 76 are formed into the housing for enabling grasping cartridge 24 such that surfaces 87 and 88 are vertical. Surface 87 holds the internal bar code label while surface 88 holds the external bar code label. Cartridge 22 (FIG. 16) is similarly modified such that its surfaces 87 and 88 respectively hold the internal and external bar code labels. Outwardly-opening gripper-slots 76 are formed in cartridge 22. Both sets of gripper-slots 75 and 76 may be molded in cartridges 22 and 24.

This use of barcode labels for cartridges are completely different from what is recited in Claim 2. Therefore, the rejection to Claim 2 must be withdrawn.

Claim 11 is patentable over Kulakowski because Kulakowski fails to disclose "a display located in said cartridge operable to display said data; and a user control for controlling which portion of said information is displayed" as recited in Claim 11. Kulakowski's cartridge does not have the recited display built in the cartridge and user control for the display.

Claims 3-10 are patentable over Kulakowski based on the above arguments and on their merits.

In summary, Claims 1-11 recite systems based on smart cartridges and carriers that provide updatable information on the data content on the storage disk. Such systems allow a user to know the content of a disk without inserting the disk into a disk drive in a computer system. Nothing in the cited prior art discloses or suggests this and other aspects of Claims 1-11. the cartridges described in Kulakowski are designed as

mechanical holders of disks and are passive and do not interact with the data stored on the disk inside the cartridge.

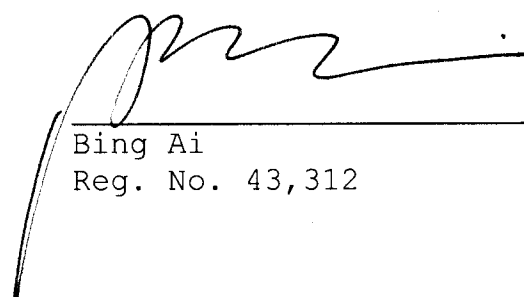
It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper.

Therefore, all pending claims are patentable and should be allowed. An official notice of allowance is respectfully solicited to issue at an early date.

Please apply any credits or additional charges to deposit account 06-1050.

Respectfully submitted,

Date: August 15, 2007



Bing Ai
Reg. No. 43,312

Fish & Richardson P.C.
PTO Customer No. 20985
(858) 678-5070 telephone
(858) 678-5099 facsimile
10744596.doc